

THE HABITAT OF *ÆNIGMATIAS* (DIPTERA: PHORIDÆ)

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The sexes of the interesting genus *Ænigmatias* like those of many Phoridæ are extremely dissimilar owing to the apterous condition and otherwise profoundly modified and degenerate form of the female. Three species, known from the winged male have been found in North America. The female of one of these is known, definitely associated with the male from a pair taken *in copula* by Malloch and described by him as *Ænigmatias flavofemorata*. Malloch's types were from Illinois, collected "on a sandy bank along the Illinois Central Railroad between White Heath and the Sangamon River." As the genus is known definitely to be myrmecophilous, at least in Europe, the specimens taken by Malloch were quite probably from the nest of some ant in the vicinity. Previous to this a single female was taken in Arizona by Coquillett and described by him as *Æ. schwarzii*. Of this he says "it occurred on low vegetation in a locality where no ant nests could be found."

During the summer of 1945, the present writer collected a large number of miscellaneous insects on sheets of "tanglefoot" fly-paper in northwestern Massachusetts while making a census of insects to determine the effect of DDT on the insect fauna of woodlands. Among the more than 300,000 specimens obtained (of which some 51% were Phoridæ) was a single female of *Ænigmatias* from Petersham, August 4. This, which is apparently the third female to be reported from North America, was trapped on the trunk of a tree several feet above the ground. From this, and from the experience of both Coquillett and Malloch it is apparent that these tiny wingless *Ænigmatias* wander freely from the ant nests where they are domiciled, perhaps following foraging ants. This specimen is not sufficiently well preserved to determine whether it is *Æ. flavofemorata*, or more probably, *Æ. eurynota* Brues known from a male collected in 1910 by Mrs. Brues at Forest Hills, Massachusetts.